

## **2. Amendments to the Claims**

**Claim 1 (Previously Presented)** A method for delivering a therapeutic gas to a person having a nasal mucous membrane, said method comprising:  
generating a flow of a therapeutic gas; and  
infusing the nasal mucous membrane with the flow of therapeutic gas; wherein the person refrains from inhaling the therapeutic gas.

**Claim 3 (Previously Presented)** A method as in claims 1, 2, 61 102 or 103, wherein the therapeutic gas is selected from the group consisting of carbon dioxide, nitric oxide, oxygen, helium, dilute mixtures of nitric oxide, and isocapnic mixtures of acid gases.

**Claim 4 (Original)** A method as in Claim 3, wherein the therapeutic gas consists essentially of carbon dioxide.

**Claim 5 (Previously Presented)** A method as in claim 3, wherein the therapeutic gas is present in a carrier gas.

**Claim 6 (Previously Presented)** A method as in claim 3, wherein generating comprises generating a flow at a rate in the range from 0.5 cc/sec to 20 cc/sec of therapeutic gas.

**Claim 7 (Original)** A method as in claim 6, wherein the gas flow is continued for from 1 to 100 seconds.

**Claim 8 (Original)** A method as in claim 7, further comprising at least a second infusing step which is continued for from 1 to 100 seconds.

**Claim 9 (Original)** A method as in claim 8, further comprising at least a third infusing step which is continued for from 1 to 100 seconds.

**Claim 10 (Previously Presented)** A method as in claim 1, wherein infusing comprises directing the flow of therapeutic gas to one nostril and allowing the flow to exit through at least one other facial orifice selected from the group consisting of the other nostril and the mouth.

**Claim 11 (Previously Presented)** A method as in claims 10 or 102, wherein the person's mouth is closed and the flow exits entirely from the other nostril.

**Claim 12 (Original)** A method as in claim 1, wherein infusing comprises directing the flow of therapeutic gas to the mouth and allowing the flow to exit through the at least one nostril.

**Claim 13 (Cancelled)**

**Claim 14 (Previously Presented)** A method as in claim 1, further comprising adjusting the flow rate of the gas to a level which the patient perceives is comfortable.

**Claim 15 (Original)** A method as in claim 14, further comprising adjusting the duration of treatment in response to changes in the gas flow rate, where decreases in flow rate result in an increase in treatment time.

**Claim 16 (Currently Amended)** A method for generating a therapeutic dosage of gas, said method comprising:

Releasing from a hand-held dispenser a flow of treatment gas comprising from 0.5 cc/sec to 20 cc/sec, when the treatment gas comprises a therapeutic gas is selected from the group consisting of carbon dioxide, nitric oxide, helium, dilute mixtures of nitric oxide, and isocapnic mixtures of acid gases.

**Claim 17 (Original)** A method as in claim 16, wherein the gas flow consists essentially of carbon dioxide.

**Claim 18 (Original)** A method as in claim 16, wherein the gas flow comprises carbon dioxide in a carrier gas.

**Claim 19 (Cancelled).**

**Claim 20 (Previously Presented)** A method as in claim 16 wherein the treatment gas further comprises a therapeutic gas and a gas selected from the group consisting of air, oxygen, nitrogen, and halogenated hydrocarbons.

**Claim 21 (Original)** A method as in claim 16, wherein the hand-held dispenser has an outlet that is suitable for sealing against a human nostril.

**Claim 22 (Original)** A method as in claim 16, wherein the hand-held dispenser has an outlet that is suitable for sealing against a human mouth.

**Claim 23 (Cancelled)**

**Claim 24 (Original)** A method as in claim 16, wherein the gas flow is continued for from 1 to 100 seconds.

**Claim 25 (Original)** A method as in claim 24, further comprising at least a second releasing step which is continued for from 1 to 100 seconds.

**Claim 26 (Original)** A method as in claim 25, further comprising at least a third releasing step which is continued for from 1 to 100 seconds.

**Claim 27 (Previously Presented)** A method as in claim 16, wherein releasing comprises adjusting the flow rate to within the 0.5 cc/sec to 20 cc/sec range.

**Claims 28 - 60 (Cancelled)**

**Claim 61 (Previously Presented)** A method for delivering a therapeutic gas to a person having an oral mucous membrane, trachea and lung, said method comprising:  
generating a flow of a therapeutic gas; and  
infusing the oral mucous membrane with the flow of therapeutic gas; wherein the person substantially inhibits the passage of the therapeutic gas into the trachea and lung by limiting inhalation of the therapeutic gas.

**Claim 62 (Previously Presented)** A method as in claim 4, wherein the carbon dioxide is present in a carrier gas.

**Claim 63 (Cancelled)**

**Claim 64 (Cancelled)**

**Claim 65 (Previously Presented)** A method as in claim 4, wherein generating comprises generating a flow at a rate in the range from 0.5 cc/sec to 20 cc/sec of carbon dioxide.

**Claim 66 (Previously Presented)** A method as in claim 65, wherein the gas flow is continued for from 1 to 100 seconds.

**Claim 67 (Previously Presented)** A method as in claim 66, further comprising at least a second infusing step which is continued for from 1 to 100 seconds.

**Claim 68 (Previously Presented)** A method as in claim 67, further comprising at least a third infusing step which is continued for from 1 to 100 seconds.

**Claim 69 (Previously Presented)** A method as in claim 18, wherein the carrier gas is inert.

**Claim 70 (Previously Presented)** A method as in claim 18, wherein the carrier gas is biologically active.

**Claims 71 - 74 (Cancelled)**

**Claim 75 (Previously Presented)** A method as in Claim 5, wherein the therapeutic gas consists of nitric oxide, the carrier gas is non-oxidizing, and the carrier gas and nitric oxide form a dilute mixture of nitric oxide.

**Claim 76 (Previously Presented)** A method as in Claim 16, wherein the therapeutic gas consists of nitric oxide, the nitric oxide is present in a carrier gas, said carrier gas being inert and non-oxidizing, and wherein the carrier gas and nitric oxide form a dilute mixture of nitric oxide.

**Claims 77 - 91 (Cancelled)**

**Claim 92 (Previously Presented)** A method as in claim 4, wherein the generating step further comprises mixing reagents, which, upon mixing, release carbon dioxide.

**Claims 93 - 101 (Cancelled)**

**Claim 102 (Previously Presented)** A method for delivering a therapeutic gas to a person having a nasal mucous membrane, a trachea and a lung, said method comprising:

generating a flow of a therapeutic gas; and

infusing the nasal mucous membrane with the flow of therapeutic gas; wherein the person substantially inhibits passage of the therapeutic gas into the trachea and the lung by limiting inhalation of the therapeutic gas.

**Claim 103 (Previously Presented)** A method for delivering a therapeutic gas to a person having an oral mucous membrane, said method comprising:

generating a flow of a therapeutic gas; and

infusing the oral mucous membrane with the flow of therapeutic gas; wherein the person refrains from inhaling the therapeutic gas.

Claim 104 (Cancelled)

Claim 105 (Previously Presented) A method as in Claim 3, wherein the therapeutic gas consists essentially of carbon dioxide, and wherein the flow consists solely of the therapeutic gas.

Claim 106 (Previously Presented) A method for generating a therapeutic dosage of gas, said method comprising:

Releasing from a hand-held dispenser a flow of treatment gas comprising from 0.5 cc/sec to 20 cc/sec, where the treatment gas comprises oxygen.

Claim 107 (Previously Presented) A method for delivering a therapeutic gas to a person having a nasal mucous membrane, said method comprising:

generating a flow of a therapeutic gas; and

infusing the nasal mucous membrane with the flow of therapeutic gas; wherein the person adjusts his breathing pattern to refrain from inhaling the therapeutic gas.

Claim 108 (New) A method for delivering a therapeutic gas to a person having a nasal mucous membrane, a trachea and a lung said method comprising:

creating an environment of an essentially pure therapeutic gas selected from the group consisting of carbon dioxide, nitric oxide, helium, dilute mixtures of nitric oxide, and isocapnic mixtures of acid gases; and

exposing the nasal mucous membrane to the environment of the essentially pure therapeutic gas.

Claim 109 (New) A method as in claim 108, further comprising the step of inhibiting passage of the therapeutic gas into the trachea and the lung.

**Claim 110 (New)** A method as in claim 108 wherein the essentially pure therapeutic gas is carbon dioxide.

**Claim 111 (New)** A method as in claim 109 wherein the essentially pure therapeutic gas is carbon dioxide.

**Claim 112 (New)** A method as in claim 108, wherein the exposing step is continued for from 1 to 100 seconds.

**Claim 113 (New)** A method as in claim 110, wherein the exposing step is continued for from 1 to 100 seconds.